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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/583,334	05/31/2000	James H. Keithly	876P086	2399

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EXAMINER
PRATT, HELEN F

ART UNIT	PAPER NUMBER
1761	12

DATE MAILED: 12/28/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/583,334	KEITHLY ET AL.	
	Examiner	Art Unit	
	Helen F. Pratt	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 November 2001* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-30 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. No basis is seen in the specification for the term "pasteurizing".

Claim Rejections - 35 USC § 103

Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonaventura et al. in view of Citrus Industry, June 99 and Pao et al.

The claims are rejected for the reasons of record cited in the last office action and for these further reasons. The claims have been amended to require the step of pasteurizing and blending on a commercial scale. Bonaventura et al. disclose that the "juice samples were aseptically filled into glass bottles". This is taken to mean that the juice samples themselves have been aseptically treated before bottling. Aseptic processing generally means to be freed from pathogenic organisms. Pasteurization also means the same. Nothing new is seen in the use of the term "blending on a commercial scale" as this is a matter of degree. The discovery of an optimum value of a result effective variable is ordinarily within the skill of the art. In re Boesch, 617 F.2d

272, 276, 205 USPQ 215, 219 (CCPA 1980). In developing an orange juice product, blending properties such as color, brix and taste are important. It appears that the particular blends of cultivars of oranges affect the color, brix and taste of the juice product, and thus are result effective variables which one of ordinary skill in the art would routinely optimize.

Therefore, it is seen that the juice was pasteurized before bottling in the process of Bonaventura et al. (abstract) and that it would have been obvious to blend on a commercial scale.

ARGUMENTS

Applicant's arguments filed 11-1-01 have been fully considered but they are not persuasive. Applicants argue that their invention relates to commercial production of orange juice, including pasteurization and handling on a commercial scale.

The information in the Declaration in sections 10 and 11 is not given weight because these sections are to the processing step of pasteurization which was not seen in the original claims or specification, nor were any references to acetaldehyde or limonin values.

The Declaration also states that juices are also refrigerated (13, line 6) as in the abstract on Bonaventura.

Applicants argue as to the Declaration that pasteurization of commercial juice is a requirement. Various known processes such as pasteurization found in commercial processing cannot be put into the specification or claims without basis in the original application. As above the reference to Bonaventura et al. disclose that this is known to

aseptic processing which would have included pasteurization. Also, they are storing their samples for up to 50 days, which shows that their sample must have been pasteurized also.

Applicants argue that their tests done on blood orange juice show that when pasteurized, that off flavors were evident and that other factors showed that they were not suitable for use in commercial orange juice, but that the oranges of Bonaventura et al. rated well as to Brix and color (section 7)). Bonaventura et al. aseptically (pasteurizes) treats orange juice and does not note any off flavors. Further information is needed to describe what is meant by an off flavor.

As to the fact that Bonaventura et al. use different cultivars in blending juice, this is seen as optimization of known orange cultivars which are known to grow at different times of the year. See In re Boesch as above.

As to the comparison of blood orange juice for use in commercial orange juice, it is not seen that they are unsuitable for commercially produced orange juice from the perspective of sensory requirements because the very title says "Refrigeration of blood oranges destined for transformation", which means for use in other products which could be a commercial use. Generally one does not go to the trouble of blending juices at home. As to the various tests, these are not the subject of the instant claims, and cannot be given weight.

Applicants argue as to Bonaventura, using unpasteurized blends, this is not seen as discussed above. The arguments as to the use of the various blends of blood orange juices, being prepared for according to standard seasonal availability and not to

enhance sensory properties or juice chemistry in the final blend, or to enhance the length of the processing season, because no specific teaching is found or the use of the claimed cultivars are not persuasive. Bonaventura is used to show the concept of using early, middle or late season fruit sources. Various sensory tests were made. The quality for particular numbers of days was said to depend on the fruit blend and the source. The reference says that "stability of juice from 3 types of Sicilian blood oranges..... was investigated for production of refrigerated "freshly squeezed" orange juice". Juice was obtained from blends of 2 or 3 varieties using ...early, middle or late season fruit sources. Therefore, the reference specifically says that blends were used, and doesn't say anything about seasonal availability. Sensory evaluation during storage was conducted. If sensory evaluation was done, it would have been evident which cultivars made the best juice and the juice would have come from cultivars giving fruits during different seasons.

Certainly, the reference to Bonavertura does not teach the specific cultivars, but it does teach that it is known to use mid-season cultivars.

Applicants further argue as to pasteurized juice. First new matter is entered into the specification, and the claims, then a Declaration is prepared to argues the virtues of pasteurization, or vice versa. It is not seen that the Bonaventura reference teaches against pasteurization as above. Certainly, aseptic food processing, i. e. pasteurization is well known.

Applicants argue that the Vernia or Frost cultivars have special mid-season advantages which are not suggested by the reference. Whether advantages are

suggested or not, the reference still discloses the use of mid-season oranges. There would have not been any point in using midseason oranges if there was not an advantage. No reason is seen to mix at all if there is no advantage.

Applicants argue as to the using midseason oranges, which is not shown by the data in "Citrus Industry". However, the article does disclose that that various characteristics are known for oranges that ripen at various times and it is seen that it would have been optimizing conditions as in In re Boesch, above, to blend juices that have the required characteristics. Certainly, Bonaventure, discloses blending juices from various seasons.

Applicants argue as to Citrus Growers not showing their invention. However, Citrus Growers was used to show that particular color numbers are well known and it would be helpful to have cultivars that mature ahead of the Hamlin orange with a 36 color score in November. Applicants have analyzed various oranges to find suitable cultivars. Pao et al., which discloses that the flavor quality of early-season Hamlin orange and Marsh white grapefruit juices could be improved by blending with juice of many available varieties and that it is known to mix juices of early season oranges with Valencia orange and other oranges. Therefore, much data is known as to mixing various cultivars and it is known to use mid-season oranges with early and late season cultivars.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Helen F. Pratt at telephone number 703-308-1978.

Hp 12-21-01